JUST BUSINESS, BETTER MARGINS

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JUNE 2019

CORE FINDINGS

- **JUST companies have outperformed their peers** in both stock market performance as well as profitability, as measured by ROE. They also command a valuation premium.
- The ROE advantage of top-performing companies in the JUST Rankings **can be over 6 percentage points higher than lower-performing peers**.
- Using a Dupont ROE decomposition, we've traced the higher profitability of JUST companies to **higher underlying operating margins**, which tend to be as much as 4% higher than those of bottom-quintile peers.
- We've also identified the top **JUST Capital Components that affect margins**, and found that worker benefits and pay, environmental efficiency, and company size are important.
- Therefore, corporate investment in worker and environmental issues should also over time **support profitability and equity market valuation**.

INTRODUCTION

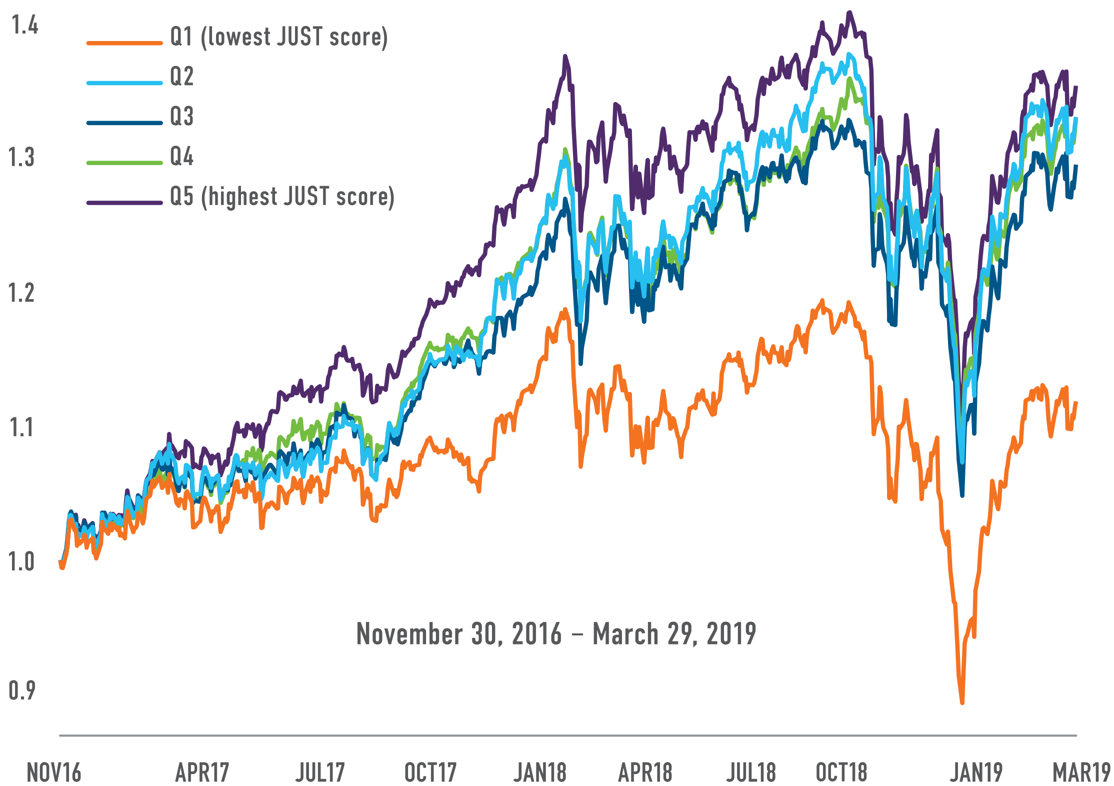
Over the past three years, JUST Capital has been building the case that companies generate higher returns when they invest in their workers, protect the environment, treat their customers well, and engage with local communities. This latest installment in our JUST Alpha research series – JUST Business, Better Margins – shows that the highest ranked companies not only generated a **Return-on-Equity (ROE) 6.4 percentage points higher than their peers**, but that they also have higher net and operating margins, and command a **meaningful valuation premium** over their lower-scoring peers.

JUST Business, Better Margins – shows that the highest ranked companies not only generated a **Return-on-Equity (ROE) 6.4 percentage points higher than their peers**, but that they also have higher net and operating margins, and command a meaningful valuation premium over their lower-scoring peers.

As we've developed this work, sustainable investing has undergone remarkable growth – according to the Global Sustainable Investing Alliance, $31 trillion in global assets were managed according to sustainable principles as of 2018, an impressive 34% increase since 2016. This pool of assets encompasses myriad strategies from exclusionary screening to impact investing to full ESG (Environmental, Social, Governance) integration, the latter of which amounts to $18 trillion worldwide and, growing 69% over the same period, is now the second-largest sustainable investing category. With this large and fast-growing asset base, our work provides a new, and important lens for investors to understand what our analysis corroborates: **that just business is simply better business**.

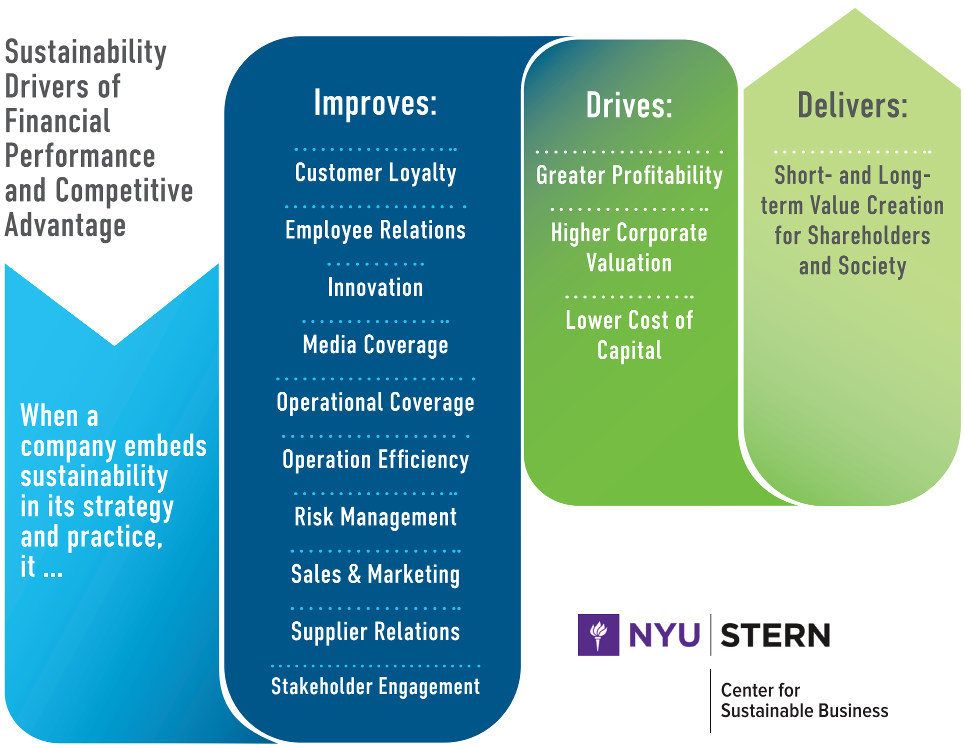
This ongoing research shows the relationship between just business behavior and shareholder returns, following the release of the inaugural Rankings of America's Most JUST Companies on November 30th, 2016. To date, we've found that companies that better reflect the priorities of the American public – based on their scores in our Rankings – deliver superior risk-adjusted returns.

In [The Out-of-Sample Alpha of Just Stocks](), we segmented the Russell 1000 companies we rank into industry-neutral quintiles, based on their JUST scores, and examined their stock market returns following the 2016 Rankings. These JUST quintile portfolios have been rebalanced to reflect the updated 2017 and 2018 Rankings and continuously tracked. As the chart below shows, since the initial 2016 Rankings, the companies with the highest JUST scores have materially outperformed their lower-scoring peers. The **annualized performance gap between stocks in the top quintile of JUST scores and those in the bottom quintile has been 9.0%**.



The outperformance of JUST companies is also visible in the live trading record of the JUST U.S. Large Cap Diversified (JULCD) Index, compared with the Russell 1000. The JULCD Index is made up of the top 50% of companies by industry, based on their JUST score. Our analysis, [Looking for Strong Returns? Ask the American People](), finds that the JULCD has delivered higher Sharpe ratios since inception, and that 83% of its outperformance, compared with the Russell 1000, cannot be explained by the standard Fama-French investment factors and **may be attributed to alpha**.

We build on these two papers here, exploring a fundamental source of alpha and focusing on corporate profitability. Research from over 2,000 studies, most recently one by New York University's Stern School of Business Center for Sustainable Business (CSB) propose that companies that embed sustainability in their strategy and practice drive greater profitability, higher valuation, and a lower cost of capital. In particular, the Stern methodology identifies greater customer loyalty, better employee relations, innovation, efficiency, risk management, media, and other factors as the source of competitive advantage.



We focus here on the profitability of Russell 1000 companies ranked by JUST Capital in 2017, and decompose their Return-on-Equity (ROE) to identify the financial driver of their profitability. To help control for look-ahead bias we look at companies' 2018 ROE, providing an out-of-sample evaluation of financial performance not otherwise captured by the 2017 Rankings.

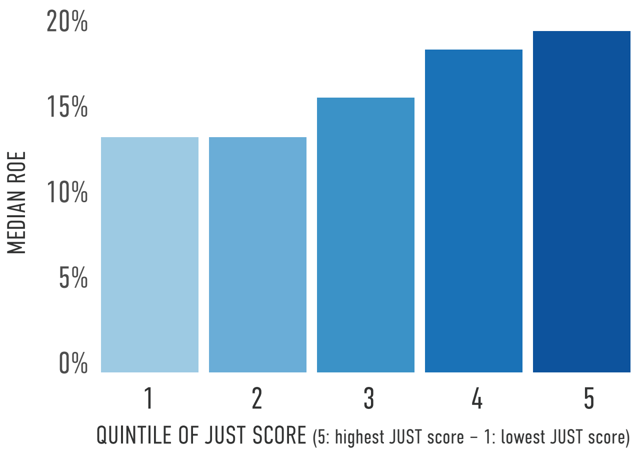
The final source of all financial data in this article is Bloomberg

THE RETURN ON JUST BUSINESS BEHAVIOR

The reported 2018 ROE (generally disclosed in the first two months of 2019) supports the claim that companies with sustainable – or just – business practices are more profitable. In the chart below, we segment companies ranked in December 2017 by quintile of JUST score and examine their median 2018 ROE. Every quintile is industry-neutral. For example, quintile 5 contains the top 20% of companies in each of 33 industries, while quintile 1 contains the bottom 20% in every industry. 2018 financial data – the latest available reporting year – represents information that was not available at the time when the companies' JUST Rankings were assessed.

We found that companies in the top quintile of JUST scores delivered a median 2018 ROE of 20.1%, versus the 13.7% ROE of those in the bottom quintile – **a difference of 6.4 percentage points**.[1] In addition to the significant difference between top and bottom quintiles (Wilcoxon test p-value of 1.1e-6), the steady progression in ROE as JUST scores increase is notable.

2018 ROE BY QUINTILE



Of the 773 companies included in this analysis, there are approximately 155 in each quintile. From the original JUST Capital 2017 ranking coverage of 875 companies, 32 companies were acquired in the course of 2018 and did not report a full year 2018 ROE, so were left out of this analysis. Of the remaining 843, 57 were removed from the analysis because the reported ROE was not financially meaningful (48 companies with negative equity, and 22 companies with tax rates over 100%). Note that any companies with negative ROE were not removed.

To obtain a more precise picture of the financial drivers of the higher ROE of just business behavior, in the next section we decompose the ROE using the well-known Dupont decomposition.

1 We used the Bloomberg API field NORMALIZED_ROE, which excludes one-time charges, to perform this analysis.

DUPONT ROE DECOMPOSITION

We employ the standard Dupont ROE decomposition to determine whether higher margins, greater asset turnover, or larger financial leverage could be the source of the ROE advantage of just companies.

$$\text{Return-on-Equity (ROE)} = \frac{\text{Net Income}}{\text{Equity}} = \frac{\text{Net Income}}{\text{Revenue}} * \frac{\text{Revenue}}{\text{Assets}} * \frac{\text{Assets}}{\text{Equity}}$$

*Return-on-Equity = Net Margin * Asset Turnover * Financial Leverage*

with,[2]

Net margin = profits per dollar of sales.

Asset turnover = Efficiency in generating sales per dollar of assets.

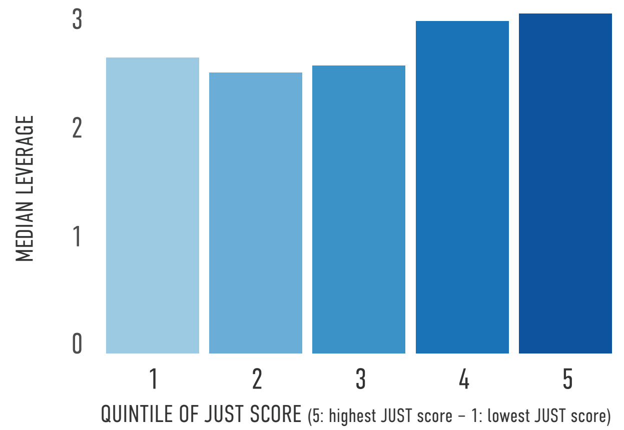
Financial leverage = Borrowings per dollar of equity capital.

This analysis shows that **higher net margins** are the main cause of the higher ROE of top-quintile stocks. While leverage across quintiles is relatively stable – around 2.5-3.1x – and turnover similarly stable in the 0.5-0.6 range, the net margin of the lowest quintile is 8.8% while the margin at the higher quintile stands at 11.9%. The margin progression across quintiles is also consistent with a monotonic relationship. Net margin drives the bulk of the difference in ROE, followed by leverage and turnover (ROE effect sizes of 5.0%, 2.1%, and 1.9% respectively).[3]

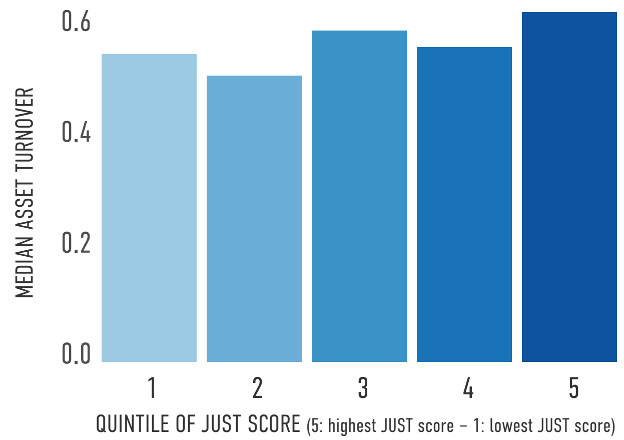
An ROE advantage from leverage could indicate an unsustainable and potentially risky competitive advantage, and while turnover would also be a meaningful reason for higher ROE, the margin advantage of JUST companies is consistent with that of high quality businesses and aligned with the Stern CSB framework.

THE THREE DUPONT COMPONENTS FOR EACH QUINTILE

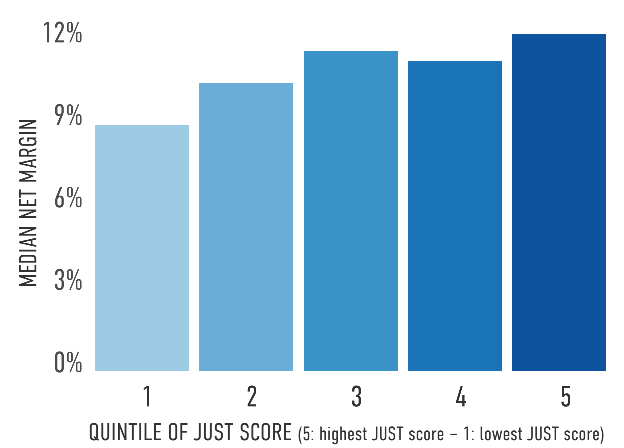
LEVERAGE BY QUINTILE



ASSET TURNOVER BY QUINTILE



NET MARGIN BY QUINTILE



2 We used the Bloomberg API fields NET_MARGIN, ASSET_TURNOVER, and FNCL_LVRG, respectively.

3 Wilcoxon test p-values: net margin: 0.002; leverage: 0.009; turnover: 0.305.

DISSECTING THE NET MARGIN

We can drill deeper into the source of the higher margins by further decomposing the net margin itself into operating margin, interest burden, and tax efficiency, shedding light on whether higher margins are caused by more efficient tax management or lower interest costs, rather than underlying operations.

$$\textit{Net Margin} = \frac{\textit{EBIT}}{\textit{Revenue}} * \frac{\textit{Pre-tax Income}}{\textit{EBIT}} * \frac{\textit{Net Income}}{\textit{Pre-tax Income}}$$

Which are known as:[4]

*Net Margin=Operating Margin * Interest Burden * Tax Efficiency*

Operating margin = EBIT margin = margin on earnings before interest and taxes.

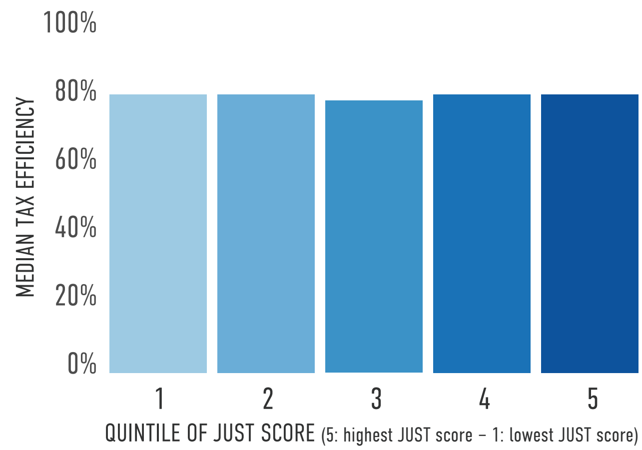
Interest burden = Share of EBIT retained after paying interest on debt.

Tax efficiency = Share of pretax income retained after paying taxes.

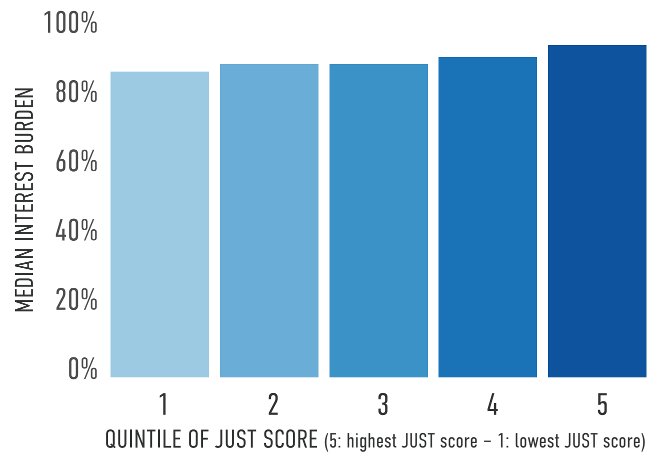
Across quintiles, median tax rates are quite uniform at about 20%, and while top quintile companies enjoy some slight advantage from having a lower interest burden, the **principal differentiator across quintiles is the operating, or EBIT, margin (OM)**. The median OM for bottom quintile companies stands at 11.3%, in contrast with a 15.2% OM for top quintile companies, a **highly significant difference of approximately 4%**.

4 We used the Bloomberg API fields T12_EBIT_TO_REVENUE, INT_BURDEN, and TAX_EFFICIENCY, respectively.

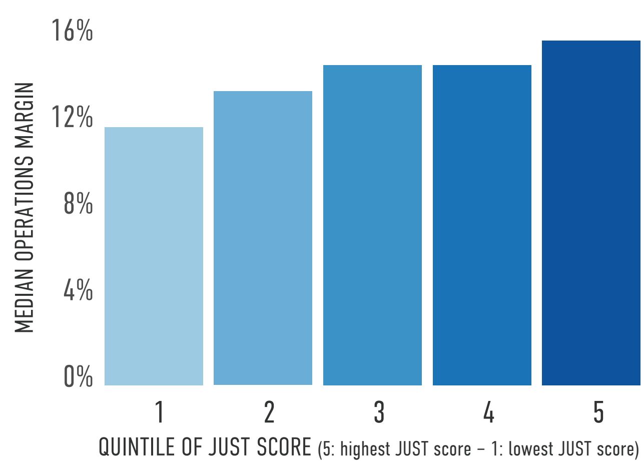
TAX EFFICIENCY BY QUINTILE



INTEREST BURDEN BY QUINTILE



OPERATING MARGIN BY QUINTILE



CAN JUST ISSUES HELP EXPLAIN MARGINS?

The JUST Capital Rankings are based exclusively on how companies perform across a range of issues identified by the public as core Components of just business behavior. These 39 Components range from fair pay for employees, respect for customer privacy, support for local communities, healthy and inclusive work environments, and the creation of quality, beneficial products. Unlike commonly used methods in the sustainable investing field to consider financial materiality, these just business behaviors were derived not from Wall street analysts, but from the results of our annual survey, which has captured the opinions of nearly 100,000 Americans on a fully representative basis since 2015. Knowing that higher operating margins are responsible for the higher ROE of the most just companies in each sector, we wanted to understand **which of these core just business practices drive outperformance, as measured by net margins.**

We performed a random forest (RF) regression of 2018 net margins on the 2017 Component scores, favoring the RF approach over linear regression due to RF's greater robustness to overfitting and outliers, as well as its ability to identify nonlinear and weak features. The objective is not necessarily to build a predictive model, but to identify the most significant Components.

We excluded three of the 39 Components that incorporate lagged financial measures from the regression to capture the relevance of non-financial metrics, and also included industry dummy variables. The regression indicates that the **non-financial JUST issues explain approximately 35% of the variation in net margin.**[5] While JUST Components are only partial determinants of margins, it's notable that the "Main Street" public's view still captures over a third of margin variability. The bar chart indicates the 10 most important Components in the regression, based on the increase in the mean-squared error if they were removed from the model.

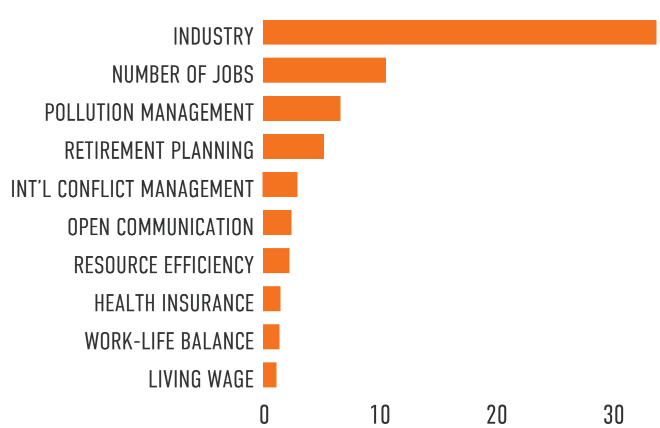
Following a company's industry, the most important components for determining margins are its size (number of workers), and whether it:

- Minimizes pollution
- Helps workers prepare for retirement
- Avoids causing or contributing to international conflict
- Communicates openly and transparently with employees
- Uses environmental resources efficiently
- Provides access to health insurance
- Provides work-life balance
- Pays a living wage

While not every one of the JUST Components is relevant to net margins, strong environmental performance and efficiency is consistent with excellence in operations. The five worker Components are also consistent with our recent Win-Win of JUST Jobs research on the value of human capital disclosure, as well as Stern's CSB framework, particularly with regard to employee relations, innovation, and sales & marketing.

Of note is that Industry is the strongest factor to explain differences in net margin, highlighting the importance of constructing industry neutral quintiles (for an unbiased analysis of components' contribution to net margin).

COMPONENT IMPORTANCE (% CHANGE IN MEAN-SQUARED ERROR)



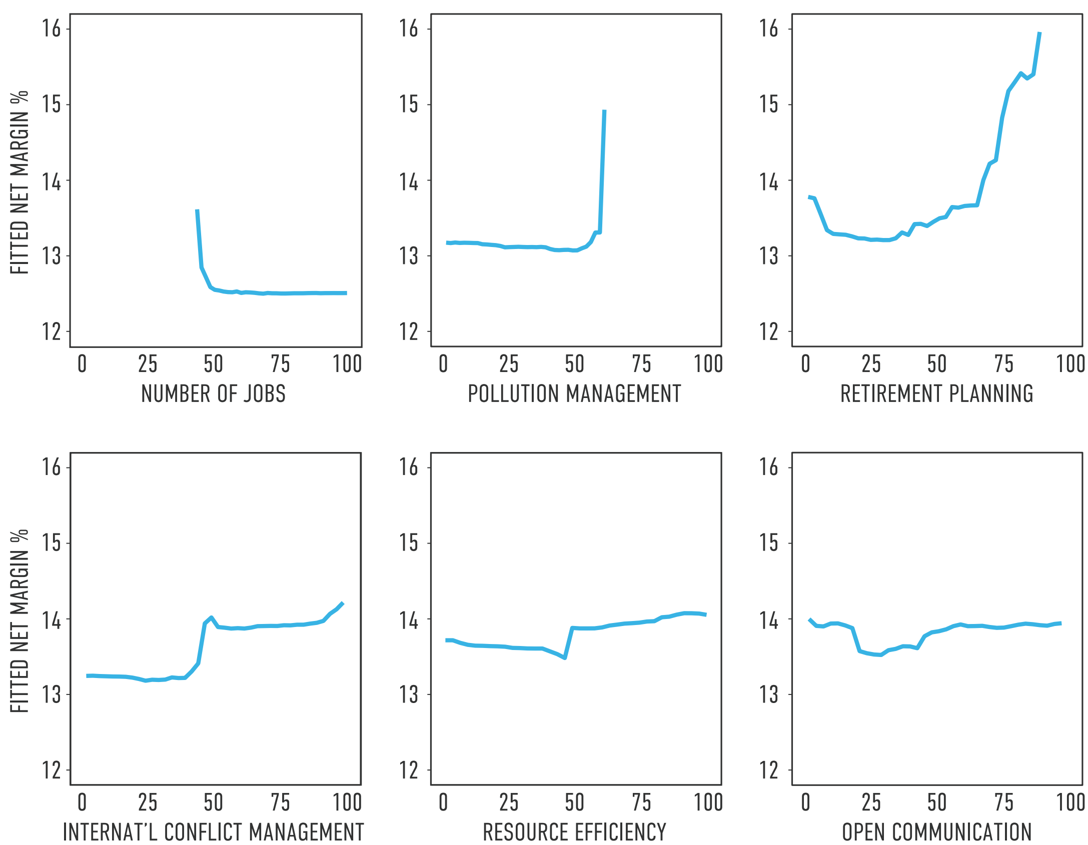
5 RF with 500 trees and 12 variables tried at each split, for net margins >0.

VISUALIZING THE MARGIN IMPACT OF JUST COMPONENTS

When companies improve their practices on these Components, what is the impact on margins? We can answer this question through the interpretable machine learning technique of *partial dependence plots*.[6] These plots allow the user a machine learning model to evaluate the marginal impact of change in an input on the model's output.

Shown below are the partial dependence plots for the six most important JUST Components. The x-axis represents a company's Component score, with 50 representing the mean, 25 the standard deviation, and a higher score indicating more just business behavior. For example, margins are higher for companies with a below-average number of jobs, **but increase for companies that pollute less, offer better retirement plans, and better manage conflict abroad**, for example.

PARTIAL DEPENDENCE PLOTS



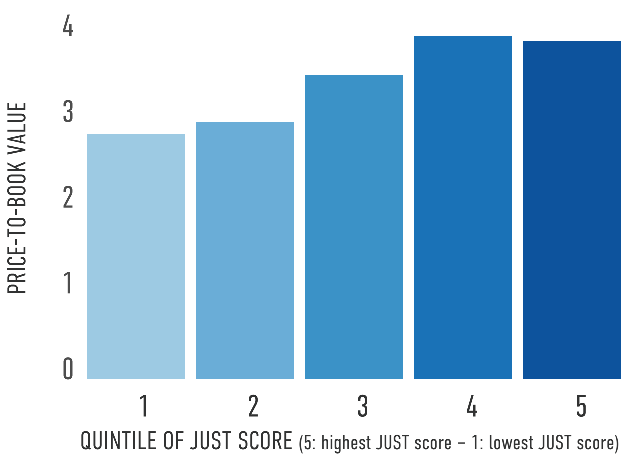
When companies improve their practices on these core Components, **what is the impact on margins?**

6 https://journal.r-project.org/archive/2017/RJ-2017-016/RJ-2017-016.pdf

THE MARKET VALUE OF JUST BUSINESS BEHAVIOR

We've shown that companies that score higher on JUST Capital's analysis of business behavior deliver a higher ROE. How is this discounted in the equity market? To probe this question, we again split the ranked companies into industry-neutral quintiles of JUST scores, and this time examine their price-to-book value (P/BV) multiples in December 2017, when the JUST scores were released. As shown, companies in the **higher quintile of JUST scores command a valuation premium over their lower-scoring peers**. The difference between quintile 5 and quintile 1 companies is approximately one point of P/BV (3.8x vs 2.7x), underscoring, underscoring that the corporate reward for just business behavior is reflected in both financial statements and market valuations.

EQUITY VALUATION BY QUINTILE



CONCLUSIONS

We've shown that JUST companies have outperformed their peers in both stock market performance and profitability, as measured by ROE, and that the higher profitability of JUST companies can be traced to higher underlying operating margins. In evaluating the Components of just business behavior, we found that worker benefits and pay, environmental efficiency, and community support can positively impact margins.

These Components paint a picture not only of just business practices, but of stronger financial performance. As our full body of JUST Alpha research has shown, when companies attend to the needs of all their stakeholders, and not just their shareholders – by paying workers well, treating customers with respect, supporting local communities, and protecting the environment – everybody reaps the rewards. Over time, we would expect to see that, as companies improve their performance on environmental and human capital factors, they will also drive profitability and equity market valuations. Just business is better business, and effective in creating long-term value for all.

ABOUT JUST CAPITAL

JUST Capital, an independent, nonprofit organization, makes it easier for people, companies, and markets to do the right thing by tracking the business behaviors Americans care about most. Our research, rankings, indexes, and data-driven tools help people make more informed decisions about where to invest, work, and buy to direct capital towards companies advancing a more just future. America's Most JUST Companies, including the groundbreaking JUST 100, is published annually in Forbes and on JUSTCapital.com.

JUST Capital was co-founded in 2013 by a group of concerned people from the world of business, finance, and civil society – including Paul Tudor Jones II, Deepak Chopra, Rinaldo Brutoco, Arianna Huffington, Paul Scialla, and others. Our mission is to build a more just marketplace that better reflects the true priorities of the American people. We believe that business, and capitalism, can and must be a positive force for change. We believe that if they have the right information, people will buy from, invest in, work for, and otherwise support companies that align with their values. And we believe that business leaders are searching to win back the trust of the public in ways that go beyond money. By shifting the immense resources and ingenuity of the $15 trillion private sector onto a more balanced – and more just – course, we can help build a better future for everyone.

ABOUT THE AUTHOR

HERNANDO CORTINA is the Director of Indexes & Analytics at JUST Capital, focused on ranking methodology, investable indexes, and analysis of financial-sector companies. Prior to joining JUST Capital, Hernando was a portfolio manager with Morgan Stanley Wealth Management, a macro analyst with Lyncean Capital, and a global research strategist and equity index trader with Morgan Stanley. He started his career in Latin America equity research at Goldman Sachs. Hernando earned Bachelor of Science degrees in Electrical Engineering and Economics from MIT and an M.A. in Mathematical Finance from Columbia University. He was also awarded the Chartered Financial Analyst designation.

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